

(AST Notes v.1)

Information regarding AST Computers LLC. This includes manufactured products as well as business practices.

AST Computer LLC & Dell Inc.

The AST Bravo Series Mini Tower Computer is somewhat software related to the Dell Dimension L Series. When booting up the computer, on the top left hand corner Windows 98 SE Splash Screen, there is a "Distributed By AST Computer" logo that is a unique touch. This is the same situation for the Dell Dimension L Series, except that there is a "Distributed By Dell" on the top left hand corner of the Windows 98 SE Splash Screen. This partially establishes the fact that AST and Dell had some similarity in marketing and software design. Another fact to note is that the AST Computer Resource Driver & Utility CD is probably based of the Dell Computer ResourceCD as well as the revisions, which are noted as A03, B01, C01, and C02 both used by AST Computers and Dell Incorporated. Pictures and other information can be found in the AST Notes folder, in the folder "Micron Millennia Pentium II/III."

AST Computer LLC & Micron Electronics Inc.

The AST Ascentia 700 Series Notebook Computer is a possible rebadge of the Micron Transport Trek 2 portable computer. The overall design structure and manual contents seem to prove as such. The only detail that may be different would be the OEM software and the Recovery material. In the AST Notes folder, in the folder "Micron Transport Trek 2," you will see pictures of the Micron Transport Trek 2 and the original manual. The wording seems very close on both manuals. The AST Bravo Series with the one type of the Pentium III Slot 1 Motherboard seems to have resemblances to the Micron Millennia Series with the Pentium II DR737-MATX and GVC DR736 Slot 1 Motherboard. They are not perfectly alike due to having minor alterations, notably the connector colors, IO shield, labeling, and certain ports. The one iteration of the motherboard used in both of the computers is a BCM IN440ZX. This board was first introduced for the Pentium II processor as stated in the User Manual, which can be found the AST Notes folder, in the folder "Micron Millennia Pentium II/III," along with the Micron Millennia manual. This theory is also true for the AST Premmia/PS Series with the Intel SE440BX-2 that correlates to the Millennia Max and ClientPro CS Seattle 2 P II 440BX ATX motherboard. The pictures of the AST and Micron IN440ZX as well as the AST and Micron SE440BX-2 motherboards and chassis can also be found here. Software wise, both manufacturers included

Microsoft Works Suite 99 on certain machines. Additional support for this board can be found at:

<http://www.bcmcom.com/tech/IN440ZX/IN440ZX.htm>

<https://downloadcenter.intel.com/product/50527/Intel-Desktop-Board-SE440BX-2>

AST Computer LLC & Mini Notebook Computer

The AST Ascentia 280M is a possible rebadge of the NEC Ready 120LT, Systemax 280M, and others. The overall design structure and manual contents seem to prove as such. The only detail that may be different would be the OEM software and the Recovery material. In the AST Notes folder, in the folder "Mini Notebook Computer," you will see pictures of the AST Ascentia 280M, NEC Ready 120LT, and Systemax 280M and the original manuals for each. The wording seems very close on both manuals.

AST Computer LLC Bundled CDs

AST Computer LLC computers come with bundled Recovery and Software media. Most of these Recovery media are based on Windows 98 Second Edition, due to most of the computers manufactured by AST Computers LLC came with Windows 98 Second Edition from the factory. There are other Operating Systems such as Windows NT 4.0 Workstation and BeOS. Some of the Recovery Media include the AST Computer Recovery CD with Windows 98 Second Edition. This CD restores the hard drive as it came from the factory. It prompts you with a Warning menu before you restore your hard disk drive along with the option of selecting Y for Recovery or N for a Restart. It is directed towards an MSDOS prompt which the Altiris Image Blaster Agent restores the original contents of the Recovery CD onto the hard disk drive. Once the process is complete, the user takes out the Recovery CD and reboots the computer to set it up with their personal information. This can be referred to the Century City User Guide found in the folder "AST UserGuides." Additionally, there is also a Resource Driver & Utility Disc that can be used to install the drivers for your computer on Windows 98 Second Edition and other compatible operating systems. Other than that, the buyer would also get the full version of Microsoft Works Suite 99 or 2000 with all 4 CDs as the bundled software including: Microsoft Money '99, Microsoft Encarta '99, Microsoft Word '97, Microsoft Graphics Studio Greetings '99, Microsoft Expedia '98, Microsoft Streets '98, Microsoft Office Small Business Edition, and more. This information is from news articles about AST Computer LLC on the Internet. Link Below:

<https://forums.techguy.org/threads/erasing-my-hard-drive-on-a-98se.392682/>

<https://forums.techguy.org/threads/98se-256-color-display-not-there.408036/>

AST Computer LLC & Logitech Inc.

AST Computer LLC may have produced an Infrared Remote Control with Receiver the company Logitech. The blue AST Logo on the remote and the receiver look close to the final blue colored AST Logo on the AST Bravo Series. It is unsure that AST Computer LLC manufactured them due to possibilities of being made by AST Research. The part number is: 234540-001. Pictures are in the "Accessories" folder for reference.

AST Computer LLC & Speakers

AST Computer LLC has bundled several speakers with their manufactured computers. These set of speakers are the Midiland MLI 699 from the online QVC Listing and the Altec Lansing ACS43W Powercube from the AST Century City User Guide and online parts link. In addition, AST Computer LLC may have produced a set of speakers that are not power amplified that rely on the device to have an amp and volume controls. The blue AST Logo on the set of speakers look close to the final blue colored AST Logo on the AST Bravo Series. It is unsure that AST Computer LLC manufactured them due to possibilities of being made by AST Research. These speakers do not have a part number present. Pictures are in the "Accessories" folder for reference. Links are below:

**QVC Listing: <http://www.qvc.com/AST-Intel-Celeron-433-MHz-Computer-w64MB-RAM,-8.4GB-HD.product.E23360.html>
https://books.google.com/books?id=90OvoBUqQoIC&pg=PA132&lpg=PA132&dq=AST+Intel+440BX&source=bl&ots=QrrA8M2rkv&sig=pSrsL8_CVLek99ztRqs7DFxz0Zk&hl=en&sa=X&ved=0ahUKEwjsh7iY4cfOAhVLQCYKHUxOAbUQ6AEIKTAE#v=onepage&q=AST%20Intel%20440BX&f=false**

AST Computer LLC & Operating Systems

AST Computer LLC has primarily used Microsoft Windows 98 Second Edition on their computers. However, there were also offerings of BeOS and Microsoft Windows NT 4.0 Workstation on select computer systems that were possibly custom build to order. Most of the machines did not have a specific model number due to being custom built for the customer for the home or business markets.

AST Computer LLC & Viglen Inc.

AST Computer LLC has manufactured a computer under the Easy PC initiative shaped roughly as the size of a toaster. This model is known as the AST Century City 100, which can come with a Celeron or Pentium III processor based on the customer's needs. This computer features a Flex-ATX motherboard with small room for

expansion connections and upgrades. These machines either came with Windows 98 Second Edition, Windows 2000, or Windows NT 4.0. However, the motherboard is an Intel Flex-ATX Socket 370 GS810 motherboard that is related to the motherboard found in the Viglen Incepta Series. Pictures and other related material can be found in the "Viglen Incepta" folder. The motherboard part number is PMPGS810 referring to the type and chipset of the board. Additional information can be found at:
<http://web.archive.org/web/20011106161551/http://www.viglen.co.uk/support/Manuals/Motherboards/GS810/GS810.asp>

AST Computer LLC Bravo Series

AST Computer LLC's Bravo Series Desktop computers come with many options. There are several models that are prebuilt: Bravo LX, MX, 217, 219, 220, 300, 330, 400AC, and more. The customer could choose any option for the internal components inside of the enclosure. Motherboard options were the Slot 1 BCM IN440ZX (Intel 440ZX), BCM GT440ZX (Intel 440ZX), BCM IN620 (SIS 620), Intel SE440BX-2 (Intel 440BX), and Intel SR440BX/ZX (Intel 440BX/ZX). Hard Drive options were the 8.4GB, 13GB, or the 20GB Hard Disk Drive from varying manufacturers. Processor options were between Intel Pentium II, Intel Pentium III, and the Intel Celeron Slot 1 Processor. Memory options consisted of 64MB, 128MB, and 256 PC100 modules. Drive Bay options were a Hi Speed CD-ROM or a Low Speed DVD ROM Drive. Graphics Card options were onboard, AGP, or PCI. Modem card options were the V.90 56K Zoom PCI Model Card. Power Supply options were a 90W and the 145W HI PRO ATX power supply. The Operating System that came from the factory is AST OEM Windows 98 Second Edition. The main bundled software is Microsoft Works Suite 99 including: Microsoft Works Suite '99, Microsoft Money '99, Microsoft Encarta '99, Microsoft Word '97, Microsoft Graphics Studio Greetings '99, Microsoft Expedia '98, Microsoft Streets '98, Microsoft Office Small Business Edition, and more. Additional options such as software tended to vary at times. When booting up the computer, on the top left hand corner Windows 98 SE Splash Screen, there is a "Distributed By AST Computer" logo that is a unique touch. All references can be found in the AST Notes folder. Link Below: <http://www.prnewswire.com/news-releases/ast-unveils-new-line-of-desktop-and-notebook-computers-75068457.html>

AST Computer LLC Century City

AST Computer LLC's Century City Micro Tower computers come with several options. There is only one model that comes prebuilt which is the Century City 100. Usually most of these machines come prebuilt leaving little leeway for customers to choose their options. One rare option was the DVI port option instead of the standard VGA port. The motherboard featured in this computer is an OEM Intel

FlexATX GS810/ AST GS81010A (Intel 810) motherboard. Main Hard Drive options were 8.4GB, 12.9GB, and 13.7GB Hard Disk Drive from varying manufacturers. Processor Options were between Intel Pentium III and Intel Celeron Series Socket 370 Processor. Memory options consisted of either 64MB or 128MB of PC100 modules. Drive Bay Options included either a Mid Speed CD-ROM Drive or a Low Speed DVD-ROM Drive. Graphics Card options were onboard. Power Supply Options were an 85W ATX power supply. The Operating System that came from the factory is AST OEM Windows 98 Second Edition. The main bundled software is Microsoft Works Suite 2000 including: Microsoft Works Suite '99, Microsoft Money '99, Microsoft Encarta '99, Microsoft Word '97, Microsoft Graphics Studio Greetings '99, Microsoft Expedia '98, Microsoft Streets '98, Microsoft Office Small Business Edition, and more. All references can be found in the AST Notes folder. Link Below:

<http://www.thefreelibrary.com/AST+Launches+the+Century+City+Computer+---+a+Breakthrough+PC+Platform...-a056895525>

http://www.arthur.ohara.net/pc_bargains.htm

AST Computer LLC Computer Cases

Most of the computers manufactured by AST Computer LLC tended to have enclosure designs from Palo Alto Products. The Bravo Series is based on the PA-450 or the PA-600 enclosure. AST Century City Series is based on the PA-120 chassis. Information can be found in the AST Notes folder under the folder name "Computer Cases."

AST Computer LLC & Europe

AST Computer LLC seemed to have manufactured most of their computer parts from Europe. This would not be surprising because there was also AST Computer UK who manufactured AST systems as well. The SR440ZX motherboard found in numerous AST Bravo Series computers can be mainly found for sale in Dutch when compared to other countries. Additionally, there was once a large listing for almost 4000 AST badged Palo Alto Products PA-450 enclosures from Germany on the Internet in the early 2000's. There are multiple references on the certain Internet forums. A link is listed below:

<http://arstechnica.com/civis/viewtopic.php?f=7&t=805515>

AST Computer LLC Premium Servers

AST Computer LLC's Premium Series servers come with many options. There are several models that are prebuilt: Premium 1000, Premium 2000, Premium 2000H, and Premium 2000Be. The customer could choose any option for the internal components inside of the two different enclosures. All four models offer an integrated 100 Mb/s Ethernet interface, an integrated Ultra or Ultra 2 SCSI controller, a complete set of system management capabilities,

including Intel's LANDesk Server Manager and Emergency Management Port, a tape back-up unit and a UPS. The Premium 1000 is an entry-level workgroup server with CPU choices ranging from the 350 MHz Pentium(R) II processor to the 500 MHz Pentium(R) III processor. It provides six expansion slots and six drive bays for a maximum storage capacity of 108 GB. The Premium 2000 is a scalable mid-range workgroup server based upon the new Intel 440GX chipset. It offers CPU choices ranging from a single 350 MHz Pentium(R) II processor to two 500 MHz Pentium(R) III processors and a maximum memory capacity of 2 GB. This server includes seven expansion slots of which two 66 MHz PCI slots, a dual channel SCSI controller with Ultra 2/LVD (Low Voltage Differential) support and six drive bays for a maximum storage capacity of 108 GB. The Premium 2000H is a scalable, high-availability application server offering features identical to the Premium 2000 with the addition of high-availability features: in particular, it includes six hot swappable drive bays that can accommodate low-profile drives (up to 18.2 GB per drive). The Premium 2000Be is essentially a Premium 2000 with BeOS , a rare option. Link Below: <http://www.prnewswire.com/news-releases/ast-announces-new-premium-server-line-premium-1000-2000-and-2000h-provide-unmatched-value-for-growing--businesses-73938582.html>

AST Computer LLC Monitors

AST Computer LLC seemed to have only manufactured one monitor throughout its time of existence. This is the AST AE-1769 CRT 17" monitor with a possible maximum resolution up to 1280 x 1024. The FCC ID number is: DK4M1769 according to an FCC search engine this number was granted to GVC. The AST site is down and the Canadian GVC site is also down when I was looking for specs WWW.GVC.COM doesn't have anything about monitors. There is not much information on this monitor on the Internet and finding anything relating to this monitor might seem difficult. There are several links regarding the sale of one: [https://groups.google.com/forum/#!search/AST\\$20AE-1769/tx-bcs.forsale/8Jzy7hhA7ZM/G6txTwNSiLgJ](https://groups.google.com/forum/#!search/AST$20AE-1769/tx-bcs.forsale/8Jzy7hhA7ZM/G6txTwNSiLgJ)

AST Computer LLC Ascentia 280M

AST Computer LLC's Ascentia 280M Mini notebook computers come with limited options. The computer comes from the factory as the 280M with 32 MB SDRAM, a 2 GB hard drive and an 8" display. The extra options include an external 24X CD-ROM drive and more. When booting up the computer, on the top left hand corner Windows 98 SE Splash Screen, there is a small AST logo that is a unique touch. Another odd bit of information is that in Computer Properties in Windows 98, the model of the computer seems to be noted as the Bravo Small, which implying that this computer is a notebook version of the Bravo Desktop. The Operating System that came from the factory is AST OEM Windows 98 First Edition with bundled

Microsoft(R) Works Suite '99.

Link Below: <http://www.prnewswire.com/news-releases/ast-unveils-new-line-of-desktop-and-notebook-computers-75068457.html>

AST Computer LLC Ascentia 700 Series

AST Computer LLC's Ascentia 700 Series Notebook computers come with limited options. There are several models that are prebuilt: Ascentia 756A, 760A, 770A, 776A and more. The Ascentia 756A and 760A come equipped with 64 MB SDRAM, a 4 GB hard drive and 13" or 14" TFT display. I am unsure whether these units had extra options but they are upgradeable and might have been customized to order by the consumer for their needs. Both notebooks are stocked with the 24X CD-ROM, V.90 56K Internet/fax modem and Microsoft(R) Works Suite '99. The Operating System that came from the factory is AST OEM Windows 98 Second Edition.

Link Below: <http://www.prnewswire.com/news-releases/ast-unveils-new-line-of-desktop-and-notebook-computers-75068457.html>

AST Computer LLC Premmia/PS Series

AST Computer LLC's Premmia/PS Series Mini Tower computers come with many options. These machines were possibly intended for the Business, Education, and Government due to their specifications and availability. Unlike the other computers manufactured by AST Computers LLC, these machines did not specifically come with a model number due to being customized for the customer. They came as the Premmia GX, GL, and PS models. The customer could choose any option for the internal components inside of the enclosure. Motherboard option was the Slot 1 Intel SE440BX-2 (Intel 440BX). A hard Drive option was the 25.5GB 7,200 RPM Hard Disk Drive from Seagate. The Processor option was the Intel Pentium III 600MHz Processor. Memory options ranged from 128 to 768MB PC100 modules. A Drive Bay option was a Low Speed DVD ROM Drive. Graphics Card options were AGP, notably the ATI Xpert 128 AGP with 16MB SGRAM. Modem card options were the Lucent Winmodem/V.90. Power Supply options were a 90W and the 145W HI PRO ATX power supply. The Operating System that came from the factory is AST OEM Windows 98 Second Edition. The main bundled software is Microsoft Works Suite 99 including: Microsoft Works Suite '99, Microsoft Money '99, Microsoft Encarta '99, Microsoft Word '97, Microsoft Graphics Studio Greetings '99, Microsoft Expedia '98, Microsoft Streets '98, Microsoft Office Small Business Edition, and more. Additional options such as software tended to vary at times. All references can be found in the AST Notes folder. Link Below:

https://books.google.com/books?id=90OvoBUqQoIC&pg=PA132&lpg=PA132&dq=AST+Intel+440BX&source=bl&ots=QrrA8M2rkv&sig=pSrsL8_CVLek99ztRqs7DFxz0Zk&hl=en&sa=X&ved=0ahUKEwjsh7iY4cf0AhVLQCYKHUxOAbUQ6AEIKTAE#v=onepage&q=AST%20Intel%20440BX&f=false

AST Computer LLC and Wake-On LAN

AST Computer LLC's used WOL or Wake-On LAN to load the AST OEM Windows 98 Second Edition onto every machine before they had shipped out to the customers. This process was very efficient by quick Operating System installs and was probably facilitated by Altiris Software, notably Altiris Image Blaster.

AST Computer LLC Parts

AST Computer LLC seemed to have a wide selection of computer hardware from different vendors. However finding parts is almost equivalent to finding a needle in a haystack for computer manufactured by AST Computers LLC. Parts for each machine tended to vary depending on the pricing as well as part availability. The "AST Parts" document can be found in the AST Notes folder for easy reference when searching for parts. Some links are below for finding part reference numbers for these machines:

[https://www.partstore.com/SearchResults.aspx?&ctf=\[2%20TO%204\]&ctfn=Parts&q=AST&bf=53&bfm=AST&sm=1&sa=1](https://www.partstore.com/SearchResults.aspx?&ctf=[2%20TO%204]&ctfn=Parts&q=AST&bf=53&bfm=AST&sm=1&sa=1)

<https://web.archive.org/web/20011222050852/http://ws.ari-service.com/cgi-bin/cgi/uprod.cgi/partners/ARIService/PartSales/PartSalesList.p?status=AST280M>

<https://web.archive.org/web/20011104141138/http://ws.ari-service.com/cgi-bin/cgi/uprod.cgi/partners/ARIService/PartSales/PartSalesList.p?status=ASTBravo>

<https://web.archive.org/web/20011205181137/http://ws.ari-service.com/cgi-bin/cgi/uprod.cgi/partners/ARIService/PartSales/PartSalesList.p?status=ASTCC>